

POLAND / Chemical Technology. Chemical Products and H-4
Their Application. Corrosion. Corrosion
Control.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1607.

Author : Mrowec, St., Wajazel, D., Werber, T.

Inst : Not given.

Title : The Corrosion of Iron and Steel at High
Temperatures.

Orig Pub: Hutnik (Polska), 1958, 25, No 1-2, 26-34.

Abstract: The general regularities in gaseous corrosion processes are considered, particularly the problems of oxygen diffusion toward the metal surface, formation of films (F), reactions occurring on the boundary of the metal - F interphase. The correlation between defects in the crystalline lattice of a metal and the nature of the F being formed are discussed and oxide of F

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POLAND / Chemical Technology. Chemical Products and H-4
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Control.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1607.

Abstract: on Zn, hematite and Ni are given as examples.
Literature data is summarized concerning:

- 1) thickness, composition, structure of individual F layers which are formed on iron depending on temperature of the medium,
- 2) mechanism of diffusion processes at various temperatures,
- 3) the effect of alloy additives Ni, Ti, Si, Al and Cr upon the scale resistance of steel, composition, structure and adhesiveness of F being formed,

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POLAND / Chemical Technology. Chemical Products and H-4
Their Application. Corrosion. Corrosion
Control.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1607.

Abstract: 4) melting temperatures of a series of metals,
maximum temperature applied in basic con-
struction metals,

- 5) mathematical treatment of the processes of
gaseous corrosion.
-- F. Slomyanskaya.

Card 3/3

WERBER, T.
WAJSZEL, D.
MROWEK, S.

Oxidation of metallic alloys at high temperatures. p. 709

WIADOMOSCI CHEMICZNE. (Polski Towarzystwo Chemiczne)
Wroclaw. Vol. 12, no. 11, Nov. 1958
Poland/

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, no. 6, June 1959
Uncl.

T. Werber

Distr: 1M3c

Type of semiconductor of α -Ag₂S resulting during the sulfurization of silver. J. Dere, T. Haber, S. Mrówek and T. Werber (Acad. Krakow, Poland). Naturwissenschaften 48, 1011 (1971). After the sulfurization of Ag by liquid S two zone boundaries Ag₂S/Ag and Ag₂S/S liquid can be observed. Both zones are n-type semiconductors. Excess S is present in form of atoms or mols. F. Schossberger

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RL RPL

DM

The mechanism of sulfidation of iron in sulfur vapor.
J. Mrowec and T. Verber (Górnictwo-Hutnicza Akad., Kiel-
ce, Poland). *Metallurgisch-technischen Akademie* 43, 335 (1958).—Cor-
rection of C.A. 53, 2034. The first sentence should read:
A polished Armco iron sheet was marked with a Pt wire and
exposed to S vapor at 600° and a S pressure of 1 mm. Hg.
K. L.C.

MIKULSKI, J.; MROWEC, S.; WERBER, T.

Examination of the sulfuration mechanism of Cu-Zn alloys by the use of
 ^{35}S radioisotopes. Bul Ac Pol chim 7 no.8:547-551 '59. (EEAI 10:4)

1. Ośrodek Fizyki Jadrowej Instytutu Badan Jadrowych w Krakowie i
Institut Chemii Ogólnej, Akademii Górnictwo-Hutniczej w Krakowie.
Vorgelegt Von H.Niewodniczanski.
(Sulfuration) (Copper-zinc alloys) (Sulfur)
(Radioisotopes)

MIKULSKI, J.; MROVEC, S.; WERBER, T.

Investigations of the silver sulfurizing mechanism by the use of
 ^{35}S radioactive isotopes. Bul Ac Pol chum 7 no.10:737-741 '59.
(EPAI 9:6)

1. Zentrum für Kernphysik (Krakau), Institut für Kernforschung.
Katedra Chemii Gorniczej, Akademia Gorniczo-Hutnicza, Krakow.
Vorgelegt von H. Hiewodniczanski.
(Sulfuration) (Silver) (Radioisotopes) (Sulfur)

MROWEC, Stanislaw; WERBER, Teodor

A certain interdependence between the velocity of oxidation of metal
alloys and their composition. Rocznik chemii 33 no.4/5:1241-1244 '59.
(EEAI 9:9)

1. Katedra Chemii Gorniczej Akademii Gorniczo-Hutniczej, Krakow
(Alloys)

MIKULSKI, Jan; MROWEC, Stanislaw; STRONSKI, Ignacy; WERBER, Teodor

Study of the mechanism of sulfurization of copper with the aid of
the ^{35}S isotope. Rocznik chemii. 33 no.6:1285-1290 '59. (EEAI 9:9)

1. Instytut Badan Jadrowych Polskiej Akademii Nauk, Krakow i
Katedra Chemii Gorniczej Akademii Gorniczo-Hutniczej, Krakow
(Copper) (Sulfuration) (Radioisotopes) (Sulfur)

WERBER T.

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Sulfurization of nickel at higher temperatures. S.
Mrowiec and I. Werber (Akad. Krakow, Poland). *Natur-
wissenschaften* 46, 100 (1959); cf. C.A. 53, 13941f.—In the
sulfurization of Ni at least 6% of the reaction occurs by the
outward diffusion of the metal according to $\frac{1}{2} S_{(g)} \rightleftharpoons S^-$
adsorbed on $Ni^{(g)} + \oplus; S^- \rightleftharpoons NIS + Ni^{\square -} + \oplus$, where
 $Ni^{\square -}$ is a hole in the Ni lattice and \oplus is an electron hole. In-
ner diffusion of the oxidant is responsible for the remainder.
The expts. were carried out at 580 and 630° with polished
Ni plates marked with a Pt wire which, in the sulfured
sample, was on the boundary of a compact coarse outer and
a fine porous (approx. $\frac{1}{2}$ as thick) inner layer of NIS.
B. M. Vanaga—

Suy
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Distr: 4E2c

3
1

MRÓWEK, Stanislaw; WERBER, Teodor

Some aspects of the formation mechanism of double-layer sulfide
scales on metals and alloys. Chemia stosow 4 no.3/4:385-396 '60.
(EEAI 109)

1. Katedra Chemii Gorniczej Akademii Gorniczo-Hutniczej w Katowicach.

(Sulfides) (Metals) (Alloys)

P/038/60/005/001/002/002
A076/A126

AUTHORS: Czerski, Lucjan, Mrowec, Stanislaw and Werber, Teodor

TITLE: The problem of isothermy in investigations of the kinetics of metal oxidation

PERIODICAL: Archiwum Hutnictwa, v. 5, no. 1, 1960, 105 - 115

TEXT: The determination of the character of the kinetic law according to which the reaction of metal oxidation occurs in its first stage at high temperatures causes very much experimental difficulties. The main difficulty consists in the fact, that in several cases it is not possible to obtain isothermal or isobaric conditions of the reaction course for the reason of the great rate of the process at its first stages. The kinetic data obtained at such conditions for the reason of the impossibility of determining such parameters as temperature and pressure or concentration, lead to wrong conclusions with regard to the kinetic law. The authors are engaged in a detailed investigation of the problem of isothermal measurements of kinetics of the first stages of sulfurization reaction of copper and silver in liquid sulfur. Measurements of the kinetics of copper sulfurization were carried out on preparations having room temperature at

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P/038/60/005/001/002/002
A076/A126

The problem of isothermy in investigations ...

the beginning of the reaction and on those heated up to the temperature of the reaction medium. It was stated that the course of the first stage of the reaction depends upon the preliminary temperature of the preparation. In the case of cold plates a certain lapse of time is necessary to heat them to the reaction temperature; in the other cases there occurs an over-heating of the preparation as a result of the exothermic reaction. The phenomenon of over-heating of the preparations is closely connected with the ratio of the heat capacity to the surface of the preparation. Based on measurements of the increasing mass of the sulfurized preparations of copper and silver heated up to the reaction temperature, and based on the thermodynamical data, the quantity of the evolving heat per unit of surface after the first 5 seconds was calculated. To confirm the results of these calculations, suitable measurements of the temperatures for the silver and copper preparations were carried out. These measurements showed that for the silver preparation the temperature rises in two seconds from 444°C to 490°C and for copper to 550°C respectively. In reference to this D. Wajszel's investigations concerning the kinetics of the first stage of sulfurization of silver in boiling sulfur carried out on heated preparations do not relate to isothermal conditions and therefore do not satisfy conditions required for such measurements. There are 2 figures, and 19 references: 8 Soviet-bloc and 11 non-Soviet-bloc. The reference

Card 2/3

P/038/60/005/001/002/002
A076/A126

The problem of isothermy in investigations...

to the most recent English-language publication reads: Licher B., Wagner C., J.
electrochem. Soc. 107, 1960, 168.

ASSOCIATION: Katedra Chemii Górnictwa, Akademia Górniczo-Hutnicza, Kraków (De-
partment of Mining Chemistry, Academy of Mining and Metallurgy),
Kraków.

SUBMITTED: June 16, 1959.

Card 3/3

P/038/60/005/004/001/002
A076/A126

AUTHORS: Mrowec, Stanislaw, Wallisch, Krystyna and Werber, Teodor

TITLE: Kinetics and mechanism of the reaction between sulphur and silver-zinc alloys

PERIODICAL: Archiwum hutniczwa, v.5, no. 4, 1960, 323-344

TEXT: The authors investigate the kinetics of sulphurization of Ag-Zn alloys containing from 6.0 to 68.5% of zinc. The rate of the sulphurization was measured by the balance method. Rate measurements were carried out for the whole concentration range of the investigated alloys at the temperature of 444°C. For four selected compositions the authors also investigated the relation between sulphurization rate and reaction temperature within the range of from 300 to 444°C. It was stated that the sulphurization process of the low-percentage alloys (up to 26.1% at.Zn) occurs according to the parabolic law. The values for the parabolic constants are given in Tables 1 and 2. It was found that with the increasing concentration of zinc in the alloy, the rate of sulphurization decreases

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Kinetics and mechanism of the reaction ...

P/038/60/005/004/001/002
A076/A126

according to the relation given by Czerski, Mrowec and Werber in Reference 3 "Archiwum hutnictwa PAN, 3, 1959, 245", where

$$k'' = A e^{-BN}, \quad (17)$$

where k'' - parabolic constant, A and B - empirical constants, N - concentration of zinc in the alloy in mole fractions. Similar to the case of sulphurization of Cu-Al and Cu-Zn alloys, several ranges of zinc concentrations in the alloy with different values of the empirical constants A and B in Eq. 17, were found. The change in the values of the constants A and B in Eq. 17 relates to a change of the energy of activation of the sulphurization process. The values for the activation energy are given in Table 3. The sulphurization process of alloys containing from 35.2 up to 68.5% at.Zn occurs according to the logarithmic law, but the sulphurization rate practically does not depend on the concentration of zinc in the alloy. The scale formed on low-percentage alloys, up to 26.1% at.Zn, consists of two layers. The external one is homogeneous and consists of α - Ag_2S , the internal layer is a heterophase mixture of sulphides α - Ag_2S and β - ZnS . Investiga-

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P/038/60/005/004/001/002

Ao76/A126

Kinetics and mechanism of the reaction ...

tions carried out by the marking method proved that the "marker" is always on the boundary of both scale layers. Investigations concerning the rate of growth of the external scale layer have demonstrated, that the growth of this layer and the growth of the whole scale occur according to the parabolic law. The authors express their thanks to Professor, Doctor Lucjan Czerski who guided and evaluated this work. There are 5 tables, 12 figures and 27 references: 16 Soviet-bloc and 11 non-Soviet-bloc.

ASSOCIATION: Katedra Chemii Górniczej Akademii Górniczo-Hutniczej, Kraków
(Department of Mining Chemistry, Academy of Mining and Metallurgy, Kraków)

SUBMITTED: October 9, 1959

Card 3/6.

MIKULSKI, J.; MROWEC, S.; WERBER, W.

Research on the mechanism of sulfuration of Ag-Zn alloys by the use
of ^{35}S radioisotopes. Bul A: Pol mat 8 no.3:179-182 '60. (EEAI 9:11)

1. Osrodek Fizyki Jadrowej, Krakow, Instytut Badan Jadrowych, PAN
Katedra Chemii Gorniczej, Akademia Gorniczo-Hutnicza, Krakow.
Vorgelegt von H.Niewodniczanski.

(Sulfuration)

(Radioisotopes)

(Silver-zinc alloys)

(Sulfur)

(Alloys)

MIKULSKI, JL; MROWEC, S.; STRONSKI, I.; WERBER, T.

On the mechanism of sulfuration of Cu-Au alloys. Bul Ac Pol mat 8
no.3:183-186 '60. (EEAI '9:11)

1. Ośrodek Fizyki Jadrowej, Krakow, Instytut Badan Jadrowych, PAN
i Katedra Chemii Gorniczej, Akademia Gorniczo-Hutnicza, Krakow.
Vorgelegt von H.Neiwoeniczenski.

(Sulfuration)
(Copper-gold alloys)

MIKULSKI, J.; MROWEC, S.; STRONSKI, I.; WERBER, T.

On the mechanism of sulfuration of Cu-Zn- alloys with low Zn content.
Bul Ac Pol mat 8 no.5:333-337 '60.

1. Ośrodek Fizyki Jadrowej, Krakow, PAN; Katedra Chemii Gorniczo-Hutniczej, Akademia Gorniczo-Hutnicza, Krakow. Presented by H. Niewodniczanski.

(Sulfuration) (Copper-zinc alloys)

BRUECKMAN, A.; MROWEC, S.; WERBER, T.; GILEWICZ, J.

Use of a radioactive zinc isotope in studies of the mechanism of sulphurization of copper-zinc alloys. Bul chim PAN 8 no.9:489-492 '60.

1. Department of Physics II, School of Mining and Metallurgy, Cracow and Department of General and Coal Chemistry, School of Mining and Metallurgy, Cracow. Presented by M. Smialowski.

(Zinc) (Isotopes) (Sulphurization)
(Zinc-copper alloys)

Distr: 4E2c

Kinetics of sulfurization of aluminum at higher temperatures. Stanisław Mrowę, Krystyna Wallischowa, and

Teodor Werher (Akad. Górnictwa-Hutnicza, Kraków, Poland). *Rozniki Chem.* 34 337-9(1900)(German summary).

—Expts. were made to det. whether the known resistivity of Al against sulfurization is due to the existing Al_2O_3 layer or to the formation of Al_2S_3 . Sulfurization at 400 and 444° takes place according to a parabolic law that seems to prove the 2nd alternative. A. Kęglewski

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MMJC(JD)

CZERSKI, Lucjan; MROWEC, Stanislaw; WERBER, Teodor

Kinetics of the sulfurization of copper in liquid sulfur. Rocznik chemii
34 no.2: 573-586 '60. (EEAI 10:1)

1. Katedra Chemii Gorniczej Akademii Gorniczo-Hutniczej, Krakow
(Copper) (Sulfur) (Sulfuration)

S/081/62/000/019/007/053
B144/B180

AUTHORS: Mrowec, Stanislaw, Werber, Teodor

TITLE: Study of the mechanism of cobalt oxidation at high temperatures

PERIODICAL: Referativny zhurnal. Khimiya, no. 19, 1962, 52, abstract
19B347 (Roczn. chem., v. 36, no. 1, 1962, 159 - 162 [Pol.
summary in Eng.])

TEXT: Co samples were oxidized in air at 1000°C and the oxidation studied
from the position of a mark made in the layer of scale. It remained always
in the separation plane between the compact outer and porous inner layer.
It is concluded that the reaction takes place by outward diffusion of the
metal and inward diffusion of the oxygen. [Abstracter's note: Complete
translation.]

Card 1/1

S/081/62/000/021/029/069
B117/B101

AUTHORS: Mrowiec, Stanislaw, Werber, Teodor, Zembura, Zdzislaw

TITLE: A case of corrosion of 1X18H9T (1Kh18N9T) steel in the petroleum industry

PERIODICAL: Referativnyy zhurnal. Khimiya, no.22, 1962, 285, abstract 211185 (Nafta (Polska), v. 18, no. 2, 1962, 48 - 50 [Pol])

TEXT: The corrosion of condenser tubes in a petroleum distillation unit is described. The tubes, which were made of 1Kh18N9T-type stainless steel with a wall thickness of 2.5 mm, were useless after three months' operation because of pitting and fissuring. Corrosion was particularly strong at the rolled-out spots. Chemical, metallographic, and X-ray analyses revealed intercrystalline corrosion under stress, which was accelerated by the great temperature gradient in the condenser. [Abstracter's note: Complete translation.]

Card 1/1

S/081/62/000/023/011/120
B149/B186

AUTHORS:

Mikulski, Jan, Stroński, Ignacy, Mrowec, Stanisław, Werber,
Teodor

TITLE:

Investigation of sulfide formation of metals and alloys,
using isotope S³⁵.

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 84-85, abstract
23B611 (Pierwsze krajowe sympoz. zastosowań izotopów techn.,
Rogów, 8-12 czer., 1960. Warszawa, no. 20, 1961 [Pol.;
summaries in Russ. and Eng.])

TEXT: Labelled atoms were used to investigate the mechanism of the oxidation of Cu and Ag and of the alloys Cu-Zn and Ag-Zn in liquid sulfur (445°C). It was observed that during sulfidation of metals (Cu and Ag) these metals diffused from the outside through the layer of reaction products. In the sulfidation of the alloys, a hetero-phased layer of dress formed as a result of the simultaneous transfer of the metal and of sulfur.

[Abstracter's note: Complete translation.]

Card 1/1

S/081/62/000/020/013/040
B158/B101

AUTHORS: Brückman, Andrzej, Mrówec, Stanislaw, Werber, Teodor

TITLE: Investigation of the mechanism of scale formation during corrosion of metals at high temperatures

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1962, 306, abstract 20I212 (Pierwsze krajowe sympoz. zastosowan izotopow techn., Rogów, 8-12 czer., 1960. Warszawa, no. 22, 1961 [Pol.; summaries in Russ. and Eng.])

TEXT: The principles of applying radioactive isotopes to characterize the diffusion of different reagents through a layer of scale formed on metal at a high temperature are examined with a view to studying the processes of oxidation on a metal surface. The mechanism whereby a Cu-Zn alloy containing 9 at% Zn is oxidized in liquid S at 444°C was studied with the aid of Zn⁶⁵ by applying a 5-10 μ film of Cu-Zn containing the Zn⁶⁵ to the surface of the specimen and determining the activity of the individual layers of scale formed after 30 and 120 min.

Card 1/2

Investigation of the mechanism ...

S/081/62/000/020/013/040
B158/B101

The radioactive Zn was detected only in the outer 50 μ layer of scale and was independent of the total scale thickness. This shows that under the condition here examined Zn plays practically no part in the general process of reagent diffusion through the scale.

[Abstracter's note: Complete translation.]

Card 2/2

MROWEK, Stanislaw; WERER, Teodor

On the mechanism of the formation of double scale sulphide
layer on copper. Roczn chemii 35 no.6:1661-1671 '61.

1. Department of Mining Chemistry, School of Mining and
Metallurgy, Cracow.

MROWEC, Stanislaw; WERBER, Teodor

Contribution to studies on the mechanism of oxidation of cobalt
at high temperatures. Rocznik chemii 36 no.1:159-162 '62.

1. Department of General and Coal Chemistry, Institute of Mining
and Metallurgy, Krakow.

MROWEC, Stanislaw; WERBER, Teodor:

Kinetics and mechanism of nickel-sulfur reaction. Pt. 2. Archiw
hutn 9 no.3:289-304 '64.

1. Department of Inorganic Chemistry, School of Mining and
Metallurgy, Krakow.

MROWEC, Stanislaw; WEMBER, Teodor

Certain current problems in studying the kinetics and mechanism
of gas corrosion of metals. Chemia stosow A 9 no.1:65-89 '65.

1. Department of Inorganic Chemistry of the School of Mining
and Metallurgy, Krakow. Submitted April 6, 1964.

MROWEC, S.; WERBER, T.; ZASTAWNICKI, M.

Mechanism of the solid state reaction in the nickel--chromium--sulfur system. Pt.1. Bul chim PAN 13 no.1:27-32 '65.

1. Department of Inorganic Chemistry of the School of Mining and Metallurgy, Krakow, and Department of Physics of Krakow Technical University. Submitted October 26, 1964.

POLAND/Physical Chemistry - Solutions. Theory of Acids and Bases. B

Abs Jour : Ref Zhur Khimiya, No 19, 1959, 67353

Author : Mine, Stefan; Werblan, Lidia

Inst :

Title : Concerning the Effect of Certain Amides on the Electrical Conductivity and Absorption Spectra of Uranyl Nitrate Solutions in Tributyl Phosphate.

Orig Pub : Roczn. chem., 1958, 32, No 6, 1419-1423

Abstract : The viscosity and electrical conductivity of 0.02M solutions of $\text{UO}_2(\text{NO}_3)_2$ (I) 1M solutions of formamide (II), N-methylformamide, acetamide, and N-methylacetamide (III) in tributyl phosphate, as well as in solutions of tributyl phosphate (IV), II, and III. Calculation of the degree of dissociation of I by the approximate Val'den (Walden?) rule shows that I dissociates significantly in II and III solutions. Amides increase the degree of dissociation of I in solutions of IV up to 1-2.5%.

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POLAND/Physical Chemistry - Solutions. Theory of Acids and Bases. B

Abs Jour : Ref Zhur Khimiya, No 19, 1959, 67353

Investigation of absorption spectra of the solutions under study in the visible region established that dissociation of I gives rise to a stronger uranyl absorption band and to a shift of the band maximum from 416 to 424 m μ . It is assumed that these phenomena are associated with a substitution of amide molecules for nitrate ions or IV molecules in the uranyl coordination sphere.

-- B. Kaplan

Card 2/2

WERBLINSKA, J.

Strains of neurotropic viruses isolated from the human cerebrum and spinal fluid on the coastline. J. Morzycki, Z. Kawecki, and J. Werblinska
Bull. Inst. medyczno-trop. Med. Gdanska, 1953, 5, 45.
In 1952, 9 strains of aspistic diseases of the CNS on the coastline were isolated. It was found that 7 of the isolated strains the presence of 9 virus strains with typical tick virus (*Ixodes persulcatus*) properties was demonstrated, together with 1 strain of lymphocytic chomomeningitis and 1 strain of herpes simplex. Virological investigation of the CNS should include, in addition to infection of mice, the direct inoculation of chick embryos with the material isolated from the patient. In this principle is not followed, it will lead to the non-strains which are toxic only for chick embryos.
B. VINEY,

P/021/60/000/006/002/002
A105/A026

AUTHOR: Werbliński, Wiesław, Master of Science

TITLE: Properties and Use of Semi-Conducting PCV

PERIODICAL: Przegląd Elektrotechniczny, 1960, No. 6, pp. 231 - 233

TEXT: A description of tests with semi-conducting PCV, obtained in the Centralne Biuro Konstrukcji Kablowych (Central Cable Designing Bureau) is given. Best results were obtained with P-1250 acetylene soot, as conductor. For measuring conductivity under mechanical strain, the device shown in Figure 1 was used. The influence of temperature on the specific resistance is shown in Table I and the influence of the P-1250 acetylene soot quality on mechanical properties of the semi-conducting PCV in Table II. The influence of the soot quality on the specific resistance and tensile strength of the composition is shown in Figure 2. There are 2 figures, 2 tables and 12 references: 1 US, 1 Soviet, 2 Polish, 1 Japanese and 7 British.

Card 1/1

P/021/60/000/008/002/002
A105/A026

AUTHOR: Werbliński, Wiesław, Master of Science

TITLE: PVC With Fillers for Cable Production

PERIODICAL: Przegląd Elektrotechniczny, 1960, No. 8, pp. 321 - 324

TEXT: Test results with PVC fillers for cable production are described. Mechanical and electrical properties of PVC mixed with conventional fillers are shown in Figures 1 - 6 and in Tables I - III. The results did not differ from those published in technical literature. In the conclusion, calcium carbonate is recommended as filler. There are 6 figures, 3 tables and 8 references: 3 British, 2 Italian, 2 German and 1 Polish.

Card 1/1

WERBLINSKI, W.

Studies on polwinit with increased thermal resistance. Polimery 6
no.12:400-403 '61.

1. Centralne Biuro Konstrukcji Kablowych.

WERCINSKI, Andrej

Notes on the question of applying mathematical methods in
biological sciences. Elovilag 2 no.4:16-19 O-D '57.

WERDA-MICH, Kazimiera

Application of cellophane adhesive tape in the laboratory examinations for enterobiasis in children. Wied. parazytol. 11 no.3:175-177 '65.

1. Wojewódzka Stacja Sanitarno-Epidemiologiczna, Lublin.

COUNTRY : POLAND
CATEGORY::

H-34

ABS. JOUR.: RZKHIM., NO. 21 1959, NO.

77086

AUTHOR : WERDENBERG, H.

INST. : NOT GIVEN

TITLE : NEW ADVANCES IN THE FIELD OF TEXTILE PRINTING WITH CIBACRON DYES.

ORIG. PUB: PRZEGLAF WLOKLENN, 13, NO 1, 21-26 (1959)

ABSTRACT : SYNTHETIC dyes of the type of the cibacron dyes can be effectively utilized in the printing of fabrics made from viscose and protein fibers. The ptium process conditions must be rigorously observed in the final rinsing of the fabrics. A comparison of the results obtained with a number of thickeners has shown that the best results are obtained from application of sodium alginate.
d gorin

card 1/1

see also; MONTHLY LIST OF EAST EUROPEAN ACCESSIONS (EEAI) LC
Vol. 9, no. 1, Jan 1960 UNCL

Weremczuk-Kroze, Franciszka.

POLAND / Chemical Technology, Chemical Products and Their
Application, Part 3. - Drugs, Vitamins, Antibiotics.

H-17

Abs Jour : Ref Zhur - Khim., No 14, 1958, No 47806

Author : Leszek Krowczynski, Franciszka Weremczuk-Krozo.

Inst : Academy of Sciences of Poland

Title : Chelatometric Determination of Little Amounts of Atropine
in Prescription Mixtures.

Orig Pub : Dissert. pharmac. PAN, 1957, 9, No.3, 189 - 196

Abstract : A method of atropine (I) determination in amounts of 1 to
10 mg in ampoule solutions of eye drops with boric acid and
belladonna extracts, as well as in powders with belladonna
extracts, MgO, NaHCO₃ and basic Bi nitrate was developed.
The method consists in precipitation of I from the solution
with K iodobismuthate, filtration of the precipitate, its
dissolving after having washed it with HCl, and titration of
the separated Bi disodium salt of ethylene-diaminetetraacetic

Cerd 1/2

POLAND / Chemical Technology, Chemical Products and Their
Application, Part 3. -- Drugs, Vitamins, Antibiotics.

H-17

Abs Jour : Ref Zhur - Khim., No 14, 1958, No 47806

acid in the presence of thiourea and Methylene Blue. It is extracted from powders and extract with chloroform. The comparison of results with other methods showed that the determination error varies in the range from 0.1 to 2.3% depending on the form of the medicament.

Card 2/2

WEREMIEJ, Janina, mgr

Waclaw Michalski; obituary. Farmacja Pol 20 no. 11/12:
469-470 25 Je '64.

WEREMOWICZ, Jan

Cardiovascular syphilis in the light of our studies. Rozpr.
wydz. nauk med. 8 no.1:105-132 '63.

(SYPHILIS, CARDIOVASCULAR) (STATISTICS)

WEREMOWICZ, Jan

WEREMOWICZ, Jan (Szpital Miejski, Nr 2, ul. Leszno 127, Warszawa)

Porphyrins, their properties and determination. Polskie arch.
med. wewnetrz. 23 no.5:701-714 1953.

1. z Oddzialu Chorob Wewnetrznych Szpitala Miejskiego Nr 2 w
Warszawie. Ordynator: prof. dr med. W.Orlowski.
(PORPHYRIN,
*pharmacol.)

WEREMOWICZ, JAN

WEREMOWICZ, Jan (Szpital Miejski Nr 2 w Warszawie, ul. Leszno 127)

Synthesis of porphyrin in the organism. Polskie arch. med. wewnetrz. 23 no.5:715-724 1953.

1. Z Oddzialu Chorob Wewnetrznych Szpitala Miejskiego Nr 2 w Warszawie. Ordynator: prof. dr med. W.Orlowski.
(PORPHYRIN, metabolism,
biosynthesis)

WEREMOWICZ, Jan

Disorders of porphyrin metabolism and porphyriuria. Polskie arch.
med. wewnetrz. 23 no.5:725-735 1953.

1. Z Oddzialu Wewnetrzneg, Szpitala Miejskiego Nr 2 w Warszawie.

Ordynator: prof. dr med. W.Orlowski.

(PORPHIRIN, in urine,

*porphyriuria)

(PORPHYRIA.)

WEREMOWICZ, Jan

WEREMOWICZ, Jan; ZAWADZKA, Maria

Late cutaneous porphyria with hypersensitivity to trauma. Przegl.
derm. 4 no.2:121-134 Mr-Ap '54.

1. Z Oddziału Chorób Wewnętrznych (IV) Szpitala Miejskiego nr 2
w Warszawie. Ordynator: prof. dr W.Orłowski. 2. Z Ambulatorium
Skorno-Wenerologicznego tegoż Szpitala. Kierownik: dr M.Zawadzka.
(PORPHYRIA,

*skin, with hypersensitivity to trauma)

(SKIN, diseases,

*porphyria with hypersensitivity to trauma)

WEREMOWICZ, Jan (Warszawa, ul. Leszno 27, Szpital Miejski nr 2)

Congenital porphyria with erythrodontia, splenomegaly and anemia
in two sisters. Polski Tygod. lek. 9 no.18:550-552 1 May 54.

1. Z Oddzialu Weterynarnego Szpitala Miejskiego nr 2 w Warszawie,
ordynator prof. dr med. W.Orlowski.

(PORPHYRIA,

congen., with erythrodontia, splenomegaly & anemia in
2 sisters)

(TETH,

erythrodontia, with congen. porphyria, splenomegaly &
anemia in 2 sisters)

(SPLENOMEGLY, complications,

congen. porphyria, erythrodontia & anemia in 2 sisters)

(ANEMIA, complications.

congen. porphyria, erythrodontia & splenomegaly in
2 sisters)

WEREMOWICZ, Jan (Warszawa, Szpital Miejski Nr 2, ul. Leszno 15)

Congenital porphyria with erythrodontia, splenomegaly and anemia
in two sisters. Polski tygod. lek. 9 no.19:585-58 9; concl. 10
May 54.

(PORPHYRIA,

congen., with erythrodontia, splenomegaly & anemia in
2 sisters)

(TETTE,

erythrodontia, with congen. porphyria, splenomegaly &
anemia in 2 sisters)

(SPLENOmegaly, complications,

congen. porphyria, erythrodontia & splenomegaly in 2
sisters)

(ANEMIA, complications,

congen. porphyria, erythrodontia & splenomegaly in 2
sisters)

WIERMOWICZ, Jan

Late skin porphyria. Polski tygod.lek. 10 no.11:329-333 14 Mar 55.

1. Z Oddzialu Wewnetrznego Szpitala Miejskiego Nr 2 w Warszawie;
ordynator: prof. dr nauk med. W. Orlowski. Warszawa, ul. Leszno
15, Szpital Miejski Nr 2.

(PORPHYRIA,

cutanea, tarda)

(SKIN, diseases,

porphyria, late)

WEREMOWICZ, Jan; PAWLICKOWSKI, Leszek

Case of methylene blue poisoning. Polskie arch. med. wewn.
25 no.6:1153-1161 1955.

1. Z Oddzialu Chorob Wewnetrznych (IV) Szpitala Miejskiego Nr
2 w Warszawie. Ordynator: prof. dr. nauk. med. W. Orlowski,
Laski kolo Warszawy, Zaklad dla Niewidomych.

(POISONING,
methylene blue, case report. (Pol))
(METHYLENE BLUE, poisoning
case report. (Pol))

WEREMOWICZ, Jan

Cation substitutes in control of edemas and transudates. Polski
tygod. lek. 10 no.14:449-454 4 Apr 55.

1. Z Oddzialu Chorob Wewnetrznych (IV) Szpitala Miejskiego Nr 2
w Warszawie; ordynator; prof. dr nauk med. W. Orlowski.

(ION EXCHANGE RESINS, ther. use,

cation exchange resins in edemas & transudates)

(EDEMA, therapy,

cation exchange resins)

(EXUDATES AND TRANSUDATES,

transudates, ther., cation exchange resins)

WERGOWICZ, Jan

Acute porphyria with a syndrome of neural symptoms. Polskie
arch.med.wewn. 25 no.4:799-809 '55.

1. Z Oddzialu Wewnetrznego Szpitala Miejskiego Nr.2 w
Warszawie. Ordynater: prof. dr nauk med. W. Orlowski.
p-ta Laski kolo Warszawy, Zaklad dla Wiewidomych.

(NERVOUS SYSTEM, diseases,

in porphyria)

(PORPHYRIA, complications,

nervous system dis.)

GUTNIAK, Olga; WEREMOWICZ, Jan

Porphyrins and porphyria. Polskie arch. med. wewn. 31 no.10:1385-
1398 '61..

1. Z Zakladu Ochrony Zdrowia Instytutu Badan Jadrowych PAN.
Kierownik: prof. dr med. E. Kowalski i z IV Zakladu Chorob
Wewnetrznych Studium Doskonalenia Lekarzy AM w Warszawie Kierownik:
prof. dr nauk med. W. Orłowski.

(PORPHRYA) (PORPHYRINS)

WEREMOWICZ, Jan

Congenital porphyrin metabolism disorders, Pol. arch. med.
wewnetr. 34 no.1:83-88 '64.

1. Z Oddzialu Wewnetrznego Szpitala Miejskiego Nr.2 w War-
szawie ordynator: dr. med. J.Weremowicz.

KOLTUNOWICZ, Michal; WERES, Stanislaw

Some results of studies on the economy and organization of
the mechanization of farming in the Poznan-Szczecin
Experiment Station of the Institute of Mechanization and
Electrification in Agriculture in the period 1957-1961. Zeszyt
probl. post. nauk roln. no. 44:213-227 '64.

1. Institute of Mechanization and Electrification in Agriculture,
Warsaw.

VASS, Gyorgy, dr.; STOICA, Aurel, dr.; WERESS, Miklos, dr.

Subperitoneal and generalized subcutaneous emphysema following
gastric surgery. Orv. hetil. 104 no.46:2187 17 N '63.

1. Egyesitett Uzemi Korlaz, Cluj, Roman Nepkoztarsasag.
(HEMORRHAGE, GASTROINTESTINAL)
(SURGERY, OPERATIVE)
(POSTOPERATIVE COMPLICATIONS)
(PNEUMATOSIS CYSTOIDES INTESTINALIS)
(EMPHYSEMA)

WERESZCZYNSKI, J.

"Geodetic Studies in the Evening School for Engineers in Lodz."
P. 122, (PRZEGLAD GEODEZYJNY, Vol. 10, No. 4, Apr. 1954. Warszawa, Poland.)

SO: Monthly List of East European Accessions, (EEAL), LC,
Vol. 3, No. 12, Dec. 1954, Uncl.

WERESZCZYSKI, J.

"Observing sea waves with the help of photogrammetric pictures". p. 366.
(PRZEGLAD GEODEZYJNY Vol. 10, No. 12, Dec. 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions. (EEAL). LC. Vol. 4, No. 4
April 1955. Uncl.

WERESZCZYNSKI, J.

WERESZCZYNSKI, J. Applying Radar Systems in Geodesy. Przeglad
geodezyjny, Warszawa (Polish Association of Land Surveyors), Jl 1956,
v. 12, no. 7, p. 261

WERESZCZYNSKI, J.

Applying radar systems in geodesy. p. 261. ACTA
PHYSICA POLONICA. Warszawa. Vol. 12, No. 7, July 1956.

East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 11, August, 1956.

WERESZCZYSKI, J: TUREK, L: NOVAK, K.

Radiolocation systems and their application in geodesy, p. 3,

PRZEGLAD NAUKOWO-TECHNICZNY, SERIA G. Krakow, Poland.
No. 2, 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, No. 11,
November 1959
Uncl.

L 10398-66 EWP(j) RM/BC
(N)

ACC NR: AM5026309

Monograph

PO/

Wereszczynski, Jan (Doctor of Engineering)

59

Analysis of sea charts of the Polish Coast in relation to the navigational instruments in use (Analiza map morskich Wybrzeza Polskiego na tle stosowanych urzadzen nawigacyjnych) Lodz, PWN, 1962. 83 p. illus., biblio. 380 copies printed.

57

B71

Series note: Lodz. Politechnika. Zeszyty naukowe, no. 43. Zeszyt specjalny, 1

TOPIC TAGS: cartography, navigational system, ship navigation

PURPOSE AND COVERAGE: This book is intended for technicians in the field of navigation, geodesy, and hydrography. It may also serve as basis for the development of modernized charts of the Polish Coast. The author, Director of the Geodetic Laboratory of Technical University in Lodz, Poland, analyzes the guiding principles for designing charts of the Polish Coast for navigational purposes, without considering the special tasks of the Navy. He proposes the design of a single chart, i.e., a Mercator chart, on which the lines of equal bearings for individual radio-lighthouses would be marked by means of luminous paints for use with radio goniometers. No personalities are mentioned.

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Evaluation of suitability of contemporary charts of the Polish Coast -- 23

Features of Polish Coast charts meeting navigational requirements under

limited visibility conditions -- 32

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Conclusions -- 68

Expected trends in navigation development in the Baltic Sea -- 68

Expected developmental trends in sea cartography relating to the Polish

Coast -- 72

12,55

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SUB-CODE: ES NG / SUBM DATE: 26Jul62 /

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Card 2/2

ORIG REF: 002 / OTH REF: 046

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| L 8287-66 EMT(d)/FSS-2 BC/WR | |
| ACC NR: AT5027507 | SOURCE CODE: PO/0000/64/000/000/0005/0049 |
| AUTHOR: Wereszczynski, J. | 23 QH1 |
| ORG: Department of Geodesy, Lodz Polytechnic Institute (Politechnika Lodzka, Katedra Geodezji) | 55 |
| TITLE: Cartographic processing of maritime charts for radar purposes | |
| SOURCE: Lodz. Politechnika. Zeszyty naukowe, no. 56, 1964. Zeszyt specjalny, no. 2, 5-49 | |
| TOPIC TAGS: cartography, navigation radar, radar picture, radar system, radar navigation, navigation aid 24, 55 | |
| ABSTRACT: In a survey article, the author discusses the value and the main factors affecting the use of the picture on the screen of a panoramic radar for navigational purposes. The problem of identifying objects on a coast and coastal outline with the radar picture as well as of comparing the radar picture with the corresponding navigational chart are discussed. The appearance of small objects, buildings, breakwaters, coastal outlines, high buildings, and buoys of various size on a radar screen is discussed. Characteristic radar pictures are reviewed; radar pictures of Gdynia harbor and Zatoka Pomorska (Bay of Swinoujscie) are shown and discussed. British, USA, Greek, and French navigational charts for radar purposes are discussed and some methods of their preparation are outlined. Polish work in producing radar maps for navigation is described. In 1957 the Committee for Geodesy, PAN (Komitet Geodezji PAN) initiated studies which resulted in specific recommendations on the preparation of radar | |
| Card 1/2 | |

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ACC NR: AT5027507

charts and which produced the first Polish radar chart for navigation purposes. A procedure for photographing radar pictures is recommended. Experimental work in the cartographic processing of radar maps is described. Recommendations for the improvement of Polish navigational radar charts are listed. Orig. art. has: 28 figures and 2 formulas.

SUB CODE: EC, NG / SUBM DATE: 29Jun64 / ORIG REF: 003 / OTH REF: 027

6C

2/2

Card

WERESZCZYNSKI, Jan, doc. dr inz.

First Polish national conference on navigation and cartography.
Przegl geod 3' no.3:106-107 Mr '65.

P/034/61/000/007/003/003
D218/D304

AUTHOR: Wereszko, Miroslaw, Master of Engineering

TITLE: Calculation of an oil piping connecting regulator
with hydraulic servo-motor

PERIODICAL: Pomiary, Automatyka, Kontrola, no. 7, 1961, 279-281

TEXT: Formulae are deduced for calculating the diameter and maximum length of oil piping connecting the servo-motor with the regulator. An equation describing the motion of servo-motor piston is given by

$$m_1 \frac{d^2x}{dt^2} + k_1 \frac{dx}{dt} + R = F \left(p - k_2 \frac{dx}{dt} \right) - m_2 \frac{d^2x}{dt^2} \quad (1)$$

where x - displacement of piston; m_1 - mass of piston; m_2 - mass of oil reduced to the diameter of cylinder; k_1 - coefficient of friction for piston; k_2 - coefficient of friction for servo-motor oil; F - active area of piston. Assuming the uniform motion of piston and treating friction force as additional to the external force R

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D218/D304

Calculation of an oil piping...

and denoting the combined forces by K and the pressure difference by Δp , then Eq. (1) can be simplified to $K = F \cdot \Delta p_t$ (2)

Pressure loss in piping is given by $\Delta p = p - \Delta p_t$ (3)

According to V.M. Ivanov (Ref. 2: Spravochnik po teplovomu kontrolyu i avtomatike v chernoy metallurgii, Metallurgizdat, Moskva, 1951) optimum velocity of piston occurs when the servo-motor is loaded by not more than 50% of its maximum force. The best performance of the servo-motor occurs when $\Delta p = 0.75 p$ (4) is satisfied. In most cases oil flow is laminar, therefore one can use Poiseuille's equation. Generally, if only 25% of the full servo-motor is used for useful work, the mass of the piston and that of moving parts can be neglected. If the piping is long, one must take into consideration the mass of oil. The maximum length of piping will depend on time constant T_t as given by

$$T_t = \frac{\gamma}{g} \sqrt{\frac{2L \cdot V}{8\pi \cdot \Delta p \cdot n \cdot T_s}} \quad (18)$$

where γ - specific gravity of the oil, g - acceleration due to gravity, and T_s - time for full stroke of piston. If it is accepted that $T_t \leq 0.01 T_s$ then the length of piping is given by

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P/034/61/000/007/003/003

D218/D304

Calculation of an oil piping...

$$l = 4\pi \cdot g^2 \cdot n \cdot \Delta p \cdot T_s^3 \cdot 10^{-4} / \gamma^2 \cdot V.$$

$$T_t = \frac{\gamma \cdot d_1^2}{32g \cdot \eta} \cdot \frac{l_1 + l_2 \cdot \frac{d_1^2}{d_2^2} + l_3 \cdot \frac{d_1^2}{d_3^2} + \dots + l_n \cdot \frac{d_1^2}{d_n^2}}{l_1 + l_2 \cdot \frac{d_1^2}{d_2^2} + l_3 \cdot \frac{d_1^2}{d_3^2} + \dots + l_n \cdot \frac{d_1^2}{d_n^2}} \quad (19)$$

gives the time constant for composite piping. Local friction losses due to bends, valves, etc. are expressed as equivalent pipe length and are given by $l_{eq} = \xi_r \cdot \frac{Re}{64} \cdot d$ (21)

An example is worked out to show the use of the formulae. There are 2 figures and 3 Soviet-bloc references.

ASSOCIATION: Katedra pomiarów maszynowych politechniki Wrocławskiej
(Department of Machine Measurement, Wrocław)

Card 3/3

WEREWKA, Stanislaw, mgr.

Technological progress in Czechoslovakia. Przegl techn no.49:5
7 D '60.

MEREYNSKI, J.

"Machinery and Drilling Equipment Factory as the Basis of Polish Construction and Production of Drilling-Exploiting Equipment", p. 160, (NAFTA, Vol. 10, No. 7, July 1954, Krakow, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

F. WERFEL

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their Application. Part 3 - Food Industry. H-27

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12909

Author : F. Werfel

Inst : Not given

Title : Aureomycin Application for Storage of Rapidly Fattened Ducks.

Orig Pub : Prumysl potravin, 1957, 8, No 7, 362 - 366.

Abstract : A method to prolong the storage duration of rapidly fattened ("early ripening") ducks is proposed. Usually such ducks cannot be stored more than a week. The treatment of a bird with 10 mg of aureomycin slows down the development of the microflora, especially of microorganisms, which cause clamminess and foul odor, and prolongs the duration of sto-

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Card 2/2

2025 RELEASE UNDER E.O. 14176

WERFEL, F.

Disinfection of straw in poultry barns. (Supplement) p. 39.

PRUMYSL, POTRAVIN. Praha, Czechoslovakia, Vol. 10, no. 1, January 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 1959.
Uncl.

WERGNER, inz., dr.

"Axial and radial compressors" by Eckert and Schnell. Reviewed
by Wergner. Strojirenstvi 11 no.12;954-955 D '61.

L 21495-66 EWP(v)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AP6010965

SOURCE CODE: CZ/0080/65/000/003/0062/0066

AUTHOR: Wergner, Frantisek (Engineer); Sefcik, Jiri (Engineer); Rybicka, Jiri
(Engineer)ORG: Institute of Automation of the Chemical Industry, Prague (Ustav pro automatizaci
chemickeho prumyslu)TITLE: Automatic control of the distribution of gases into several reactors connected
in parallel

SOURCE: Automatizace, no. 3, 1965, 62-66

TOPIC TAGS: analog computer, automatic control, chemical engineering

ABSTRACT: This article describes the chemical process and presents a derivation of
equations for the process for solution with a combination of two analog computers.
Orig. art. has: 7 figures, 21 formulas, and 2 tables. [JPRS]

SUB CODE: 09, 07 / SUBM DATE: none / ORIG REF: 008 / OTH REF: 002

Card 1/1d/s

UPC: 66.07-55

WERNER, F.

P 2

10(0); 26(1)

PHASE I BOOK EXPLOITATION

CZECH/2369

Ceskoslovenská Akademie Ved. Sekce technická

Proudění v lopatkových strojích (Flow Through Turbomachinery) Praha, Naklada-
telství Československé Akademie Věd, 1958. 413 p. (Series: Its: Sborník
ústavu pro výzkum strojů) Errata slip inserted. 1,250 copies printed.

Scientific Ed.: Jan Jerie, Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences; Resp. Ed.: Ladislav Hrdina; Tech. Ed.: František Končický.

PURPOSE: This collection of papers is intended for engineers and scientific workers in the field of turbomachinery.

COVERAGE: The collection covers turbomachinery theory, investigations of the flow of working substance in basic elements of turbomachines, phenomena accompanying flow and variable with time, and investigations of various problems

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Flow Through Turbomachinery

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on experimental machines and models. A Russian and an English summary follows each paper. No personalities are mentioned. There are 189 references: 73 Czech, 57 English, 38 German, 20 Russian, and 1 Dutch.

TABLE OF CONTENTS:

Jerie, Jan, Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences, VUTT (Research Institute for Heat Engineering). Research on Problems of Flow Through Turbomachinery; its Importance and Techniques 9

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I. THE THEORY OF MACHINERY

1. Spacek, L. Doctor of Natural Sciences, VUTT. Optimum Choice of Potential Velocity in Designing Aerodynamic Equipment 23
2. Wergner, F., Engineer, CKD Stalingrad. Optimum Solving of the Inlet to the Impeller of a Turbocompressor With Limit Performance 31
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3. Erhart, František, Engineer, Doctor of Technical Sciences, VUTT. Designing Warped Blades of Centrifugal Pump and Water Turbine Impellers With Minimum Danger of Cavitation 72

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Discussion: Hosek, J., Engineer, Doctor, VZLU

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Hosek, Josef, Engineer, Doctor, VZLU

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Masek, Zdeněk, Engineer, VZLU

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5. Belík, Luděk, Engineer, VUTT. Methods of Research on Airfoil Cascades and Their Application in Designing Turbine Blades

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Discussion: Kousal, Milan, Engineer, PBZKG (The First Brno Engineering Works of Klement Gottwald) Design of a Reaction Turbine Blade Profile

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Flow Through Turbomachinery

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6. Bukovsky, Jan, Doctor C. Ae. (Civil Aeronautics) VZLU. Research on Arrangement of Blading in High-speed Turbomachinery 146
7. Zajic, Vladimir, Doctor, Engineer, ZVIL (V. I. Lenin Works, Plzen). Evaluation of Measurements of Airfoil Cascades and Use of Analog Computers 200
- Discussion: Kucera, A., UMS (Institute of Mathematical Machines, Czech Academy of Sciences). Basic Functional Elements of the Anapos Analog Computer 223
- Pepny, Josef, Engineer, VUS (Machinery Research Institute) ZVIL, Plzen. Wind Tunnel for Airfoil-Cascade Research 225

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8. Janour, Zbyněk, Doctor of Natural Sciences, VZLU. Modern Ideas on Turbulence in the Boundary Layer 233
Discussion: Dvořák, R., Engineer, and M. Pichal, Engineer, ŠÚS (Institute for Research on Machinery, CSAV). Contribution to Measuring Turbulence in a Compressible Medium 248
9. Skarecký, Rudolf, Engineer, VUTT. Self-excited Vibrations of Blades in Turbomachinery 259

IV. RESEARCH WITH MODEL MACHINES

10. Moravec, Zdeněk, Engineer, VUTT. An Approximate Method of Flow Analysis in Air Turbomachine Elements With An Example Applied to Axial Blowers 277
11. Vlasák, Miroslav, Engineer, and Folta, Václav, Engineer, VUTT. Experimental Axial Compressor 289
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Measurement of the Effect of Basic Hydraulic Engineering
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Directional Probes [for three-dimensional investigation of flow] 405

16. Tomanec, Ladislav, Engineer, UVS CSAV. Electric Measurement of
Pressure

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17. Slepicka, F., Engineer, UVS CSAV. Torsional Dynamometer

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AVAILABLE: Library of Congress

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GO/fal
11-29-59

WERGNER, Frantisek, inz.; SEFCIK, Jiri, inz.; RYBICKA, Jiri, inz.

Automatic control of gas distribution into several parallel connected reactors. Automatizace 8 no.3:62-66 Mr '65.

1. Institute of Chemical Industry Automation, Prague.

WERICH, Otakar, inz.

"Sealing devices in the chemical industry" by J.Rozkydalek,
K.Urbanek, M.Splichal. Reviewed by Otakar Werich. Stroj
vyr 13 no.2:153 F '65.

BODNAR, Jeno, dr.; HARGITAI, Ferenc, dr.; WERKNER, Janos, dr.

Experiences with dalgol. Orv. hetil. 102 no.14:643-645 2 Ap '61.

1. Fovarosi Tetenyi uti Korhaz, I Belosztaly, Budapest.

(HYPNOTICS AND SEDATIVES ther)

WIRLE, J.

3-A

Influence of relativistic corrections upon singular nuclear potentials. J. Verle (Univ. Warsaw). *Phys. Rev.* **87**, 150-60(1952).—Math. The static interaction potential between nucleons, as deduced from meson field theories, contains an inadmissible $1/r^3$ singularity in its noncentral part. A method is presented which clarifies this problem and which operates consistently in the configuration space.
(I. M. Petty)

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|-----------|---|-----------------|
| Werle, J. | | |
| POL. | <p>Werle, J. / A new approximation method for the mass-n field theory. Bull. Acad. Polon. Sci. Cl. III, 1, 23-26 (1953).</p> <p>The method of Einet (Bull. Acad. Polon. Sci. Cl. III, 1, 23-26 (1953)) is applied to the equations of field theory. It is assumed that the solution is qua- dratic, so that it is taken as an infinite series, according to the order of time derivatives. Differentiating a term in the series by one, one obtains an infinite series of simultaneous equations, which can be solved in this way, taking into account only even orders which the field sources contain. symmetrical with respect to time direction and corre- sponds to half the sum of the retarded and advanced potentials. The series with odd orders corresponding to half the difference of these potentials goes to infinity at infinity. The author also obtains an expression for the solution in terms of an integral operator.</p> <p style="text-align: right;">N. Rosen (Hilfe).</p> | 20 20 S10 |

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| WIRELESS | | |
| | POL. | 530.143 2612. On mutual nuclear interaction through nuclear fields. J. Wi- 3, 1, No. 3-4, 95-8 (1953). The approximation paper [Abstr. 75 (19- 14)] is used to obtain the classical form of the interaction potential for the case of a non-distributive (but otherwise general) type of coupling. G. FIELD <i>PMZ-202</i> |

WERLE, J.

P(0) L.

Werle, J. An application of a new approximation method to quantum calculations in the meson theory of nuclear forces. Bull. Acad. Polon. Sci. Cl. III, 1, 173-176 (1953).

The method of successive approximations [A. Einstein, L. Infeld and B. Hoffmann, Ann. of Math. (2) 39, 65-100 (1938); J. Werle, Bull. Acad. Polon. Sci. Cl. III, 1, 23-26 (1953); these Rev. 5, 1011] is used in calculations involving quantized fields. For the case of a pseudoscalar meson field with pseudoscalar coupling, an expression is obtained for the interaction between two nucleons which is essentially equivalent to that given by the ordinary second-order perturbation theory.

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N. Rosen (Haifa)

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WERLE, J.

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4. The problem
of "equivalent" potentials in
classical equations of
motion. *J. Werle, Bull. Acad.
Polon. Sci. Cl. I. I.*

By introducing a
relativistic equation
of motion of a particle in a
static potential, we
can deduce by com-
paring the relativistic and non-
relativistic Hamilton
functions, the method
illustrated by a
Coulomb and Yukawa

of "equivalent" potentials in
motion. *J. Werle, Bull. Acad.
Polon. Sci. Cl. I. I.*

modified potential V' in the
equation of motion of a particle in a
static potential, many
relativistic effects in the
description of its orbit
can be accounted for. V' can
be deduced by comparing
the relativistic and non-
relativistic Jacobi equations. The method
is illustrated by a
Coulomb and Yukawa

G. FIELD

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| WERLE J. | | |
| 2830 | Werle J. Obtained Pseudocumene from Coal Tar. "Otrzymywanie pseudokumenu ze smoły węglowej". Przemysł Chemiczny, No. 7, 1953, pp. 347—350, 2 fig., 4 tabs. A method is given for separating technical pseudocumene from solvent-naphtha, the test sample of which contained 4.33% of this product. To compare the purity of technical products, a method of purifying pseudocumene was worked out. The results of physico-chemical analysis of samples of different purity are given. | 663.741 : 547.535.032 |
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~~WERLE~~ POL... USSR.

Pseudocompounds from coal tar
Chem., Warsaw). Przemysl Chemiczny, Warsaw, Poland, 1953 (Eng.
lish summary).—McCall's (I) was sepd. from 3 fractions of
solvent-naphtho. (II), b. 163-172°, 1% of II, contg. 4.33%,
of I, by sulfonation of II to get sulf pseudocompounds (III) and
hydrolysis of III with overheated H₂O steam. To II an
equal amt. by vol. of concd. H₂O₂ (d. 1.83) was added
dropwise at 80°. On cooling and slowly adding H₂O, in amts.
equal to untreated II, III crystd. in the upper layer and dild.
H₂SO₄, together with other compds., remained in the lower
layer. III was purified by secondary sulfonation with H₂SO₄
(80% of III) and distn. from H₂O. The white crystals of
III, m. 111.7°, were hydrolyzed with steam at 200°; the
hydrocarbon was distd. from tech. 50% I, and from pure III (m. 111.7°) at 135°, yield 83% I.
I was sepd. from H₂O and distd.

Gene A. Wozny

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| WERLE, J. | | |
| | 4756. "Equivalent" potentials for the motion of the nucleon in pseudoscalar fields. J. WERLE. <i>Bull. Acad. Pol. Sci. Cl. 1, 3, No. 2, 87-90 (1955).</i> The static approximation for the nucleon-nucleon potential due to direct symmetric coupling with pseudoscalar mesons is derived. P. T. MATTHEWS | 530.143 12/16 <i>PML 634</i> |

WERLE, J.

"Conference on Nuclear Physics in Glasgow," by Jozef Werle. Postepy Fizyki, Vol VI, 1955, p. 137.

WERLE, J.

"Report from the Meetings of the Theoretical Section of the International Conference
in Pisa," by d. Werle. Postepy Fizyki, Vcl. VI, No. 6, 1955, p. 659.